### SURFACE TRANSPORTATION AND THE GLOBAL ECONOMY

On behalf of the U.S.-China Chamber of Commerce, I thank you for the opportunity to be with you today. As a non-profit organization that is dedicated to promoting trade and understanding between the two countries, we have worked with many U.S. corporations in their cross border activities and have traveled to China extensively. Hence, we appreciate this occasion to share a few observations with you in regard to the rapid development of China's economy and its relationship with surface transportation.

#### INTRODUCTION

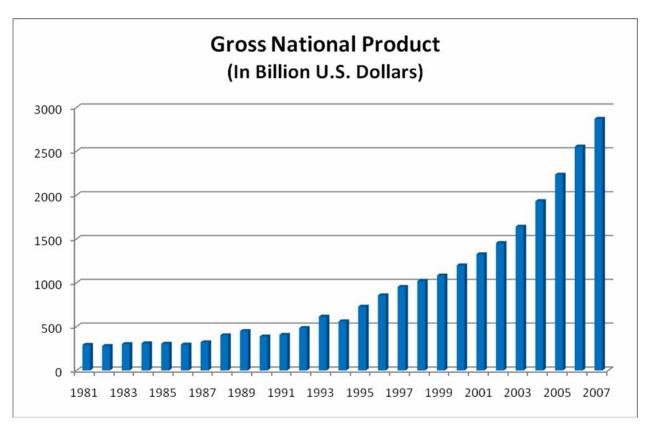
## What has changed in the world economy?

In 2005, for the first time, the emerging nations surpassed the developed nations in their contribution to the global economy. In aggregate, they accounted for 80% of the world's population; 50% of the world's GDP (based on Purchasing Power Parity); 70% of the world's foreign reserve; and 50% of the world's energy consumption (Source: The Economist). The rise of the emerging economies was primarily due to certain major events that occurred in the late 80s and early 90s. The fall of the Berlin Wall together with the opening up of China has reduced the barriers for international trade. With the advent of inexpensive microchip, Internet, and telecommunication technology, the rate of globalization has accelerated.

The Internet has made multiple channels of marketing feasible, and the change in geopolitics has allowed freer flow of goods and capital. Hence, a massive reallocation of resources has occurred whereby production of goods with high labor content and ease of shipment continues to shift to the emerging countries. Among all the countries, China has emerged as the world's manufacturing center. The result is not just due to the overall change in technology, economic and political environment, but also to the unique and inherent cultural and political characteristics of the country.

#### Economic Development of China: A Historical Perspective

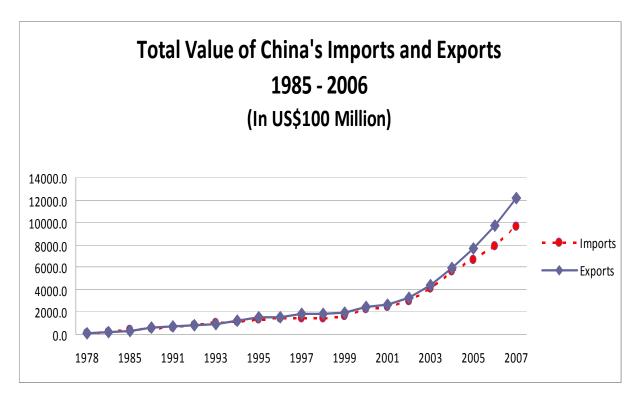
While China reported a GNP of under US\$250 billion in 1982, its GDP reached US\$483 billion in 1992. In 2007 its GNP was US\$2,871 billion, which was about 10 times of 1982. It now has a large foreign reserve of US\$1,528 billion and has the largest trade surplus in the world.



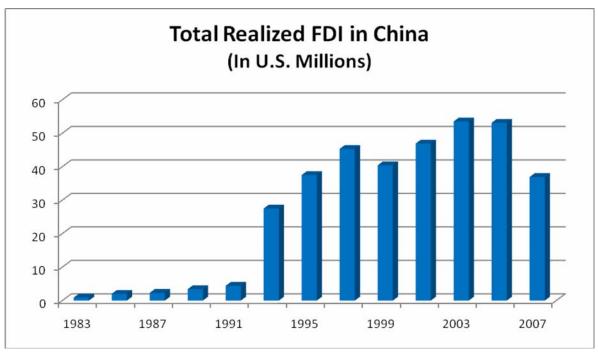
Source: IMF; 2007 Estimated

Prior to 1978, China was primarily a self sufficient, semi-closed door economy. Being inspired by the four little tigers: Taiwan, Hong Kong, Korea, and Singapore, China began pursuing an export economy. Trade is essential to the integration of the global economy, and export is critical to the developing countries. For most developing countries, a domestic economy hardly exists. With a population primarily consisting of relatively less educated, unskilled, or semi-skilled labor, those countries mainly rely on the export of its natural resources or low value added, labor intensive goods.

The Chinese strategy is to exploit the comparative advantage of its labor force, to earn foreign exchange, to learn modern technology, to access foreign markets, and to create jobs for its 1.3 billion people. China was able to achieve those goals in a short spam of 30 years because of its size, both geographical and population, long coastal line, the will, its unique culture, and perhaps most importantly, overseas Chinese. It was the overseas Chinese in Hong Kong, Taiwan, Southeast Asia who helped start China's economy by pouring in investments, relocating their factories, bringing in management and production knowhow, and providing access to overseas markets. Naturally, the beneficiaries were cities in Southern part and the coastal region of China.

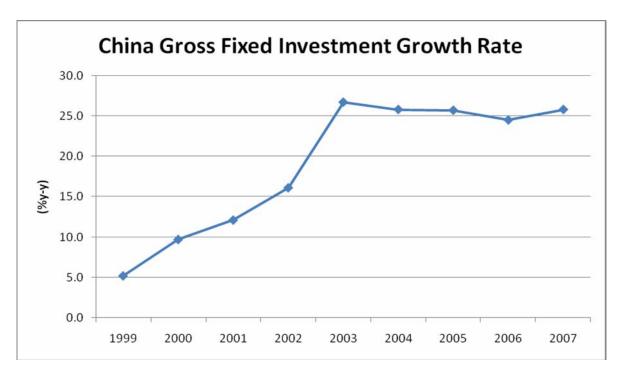


Source: National Bureau of Statistics of the People's Republic of China



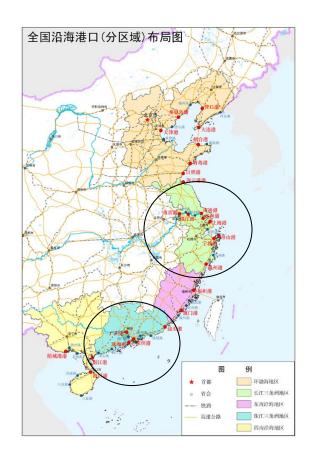
Source: Ministry of Commerce of the People's Republic of China \*2007 Data from January to July

China's economy is built on export, investments and reinvestments (though uncontrolled) in infrastructure and capital goods; foreign direct investment; and rapid development of its domestic market.



Source: World Bank

Map of Ports in China – Centers for Exports



#### SURFACE TRANSPORATION; THE GLOBAL ECONOMY; DOMESTIC ECONOMY; AND CHINA

For a developing economy that depends on exports, it is essentially that goods can be shipped from the factories to the port, energy source can be redirected to the power stations that supply to the factories, raw materials and parts can be transported to the assembly lines, and overseas buyers and engineers are able to get to the factories without extended delay. Initially, when China's surface transportation was in its infancy (0 miles of expressway prior to 1988), the economic development of China concentrated on the coastal region and southern part of China because goods could easily be shipped to foreign countries. With a concerted effort, China began an aggressive plan of building a national network of surface transportation. In 1992 they established a plan that designated 45 key centers for the highway system, and in December 2004, the announced the "7918 Highway Network." With literally zero mile of expressway prior to 1988, China had 168 miles in 1989, 10,000 miles in 2001, and 25,480 miles in 2005. It is expected that in 2020, all cities with a population of over 200,000 will be connected.



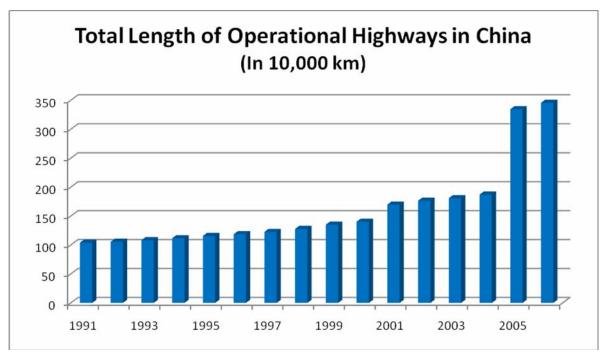
China's Rail, Highway and Expressway



Source: National Bureau of Statistics of the People's Republic of China

China's Railway System





Source: National Bureau of Statistics of the People's Republic of China

China's Highway and Expressway



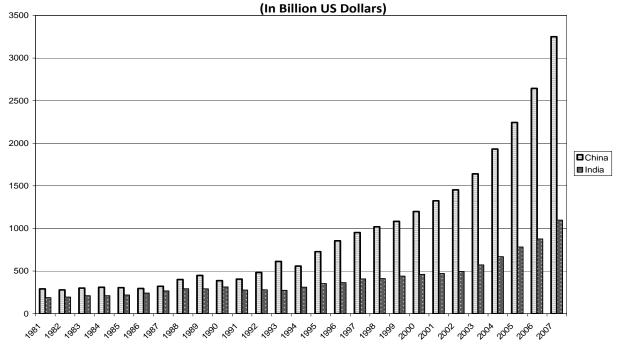
The continuing effort toward building its transportation system is essential to the sustainability of its economy and social order. Labor and land costs in the coastal region are progressively more expensive. Wealth disparity between the coastal area and inland area has reached an alarming level that will disenfranchise certain sectors of the population. Regionalism has become more intensive. As the world economy is increasingly globalized, China's domestic economy needs to be more integrated. A more efficient surface transportation system will also allow specialization of industries in certain regions that have a comparative advantage so as to achieve a higher degree of efficiency. Without a well developed surface transportation system, this will not be achieved.

The construction of China's surface transportation system is arguably the first time in the history of mankind that a society of such a large scale involving hundreds of millions of people has moved so swiftly to build an entirely new network in such a short period of time. China has built and continues to build its network in such a grand scale, not only because of export needs, but also because of the unique characteristics of the country. With a population of 1.3 billion, China has no choice but to invest heavily in infrastructure to create jobs. In a country where symbolism prevails, a modern transportation network also signifies the modernization of the country. In a country where "Private Land Ownership" does not exist, China can relocate millions of people to build new towns, new roads, and new industrial parks. This alone has made China unmatchable by other nations.

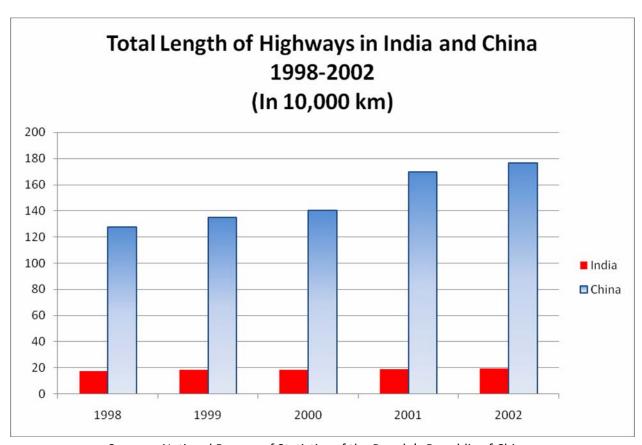
## **CHINA VERSUS INDIA**

While China has emerged as the manufacturing center in the world, India has lagged behind except in IT outsourcing. Export of manufactured goods requires surface transportation to get the goods to the ports; export of IT only requires phone lines and internet access. Although China and India share many things in common, such as uniquely large populations and a richness of culture, their economic and political systems fundamentally differ. As an emerging nation tends to depend on exports of low value added goods, India's economic growth lags behind China. While there are many reasons accounting for such a disparity, the lack of a good surface transportation has made export difficult.

# **Gross National Products between China and India**



Source: IMF



Sources: National Bureau of Statistics of the People's Republic of China; India Department of Road Transport and Highways

#### **CONCERNS**

Every success has its perils. As China the economy of China continues to grow, it faces many potential problems that are related to their surface transportation system. Their network of highways will potentially suffer from bottlenecking. Traffic congestion, which results from poor design of certain highways, a sudden large increase in the number of vehicles on the road, and lax enforcement of traffic regulations, will create inefficiency and increase cost of manufacturing. Pollution and global warming are become more predominant and threatening the health and environment. As good surface transportation is critical to the global economy, controlled investments, coordinated efforts and good planning are critical to the sustainability of the economic growth.